

IN THE CLAIMS:

The following is a current listing of claims and will replace all prior versions and listings of claims in the application. Please amend the claims as follows:

1. (Currently Amended) A communication system for communication using wireless signals ~~including down-link signals to and up-link signals from mobile stations,~~ the system comprising[[,]];
 - a plurality of transceiver stations ~~having~~ configured to transmit and receive wireless signals over broadcast channels and dedicated channels, said wireless signals including down-link signals to and up-link signals from mobile stations; carried by said wireless signals,
 - a plurality of measurement units each configured ~~means~~ to form measurements of said wireless signals[[,]]; and
 - a plurality of zone managers, various ones of which are connected to one another to form a zone network, wherein each zone manager ~~means including,~~ includes:
 - a processor ~~means~~ configured to process ~~said~~ measurements formed by one or more of said plurality of measurement units to determine preferred ones of said plurality of transceiver stations for use in transmitting wireless signals associated with a particular mobile station over one or more particular dedicated channels, wherein transmission over the particular dedicated channels for the particular mobile station includes the use of a first radio resource ~~particular dedicated channels for a particular mobile station~~[[,]]; and
 - a control unit ~~means~~ configured to dynamically switch between said preferred ones of said plurality of transceiver stations during said transmitting wireless signals associated with the particular mobile station over the one or more particular dedicated channels, to provide said particular dedicated channels for said particular mobile station separately from one of said transceiver stations providing particular broadcast channels for said particular mobile station, and wherein a radio resource used for said particular dedicated

~~channels for said particular mobile station remains unchanged as a result of dynamically switching between said preferred ones of said transceiver stations wherein said dynamic switching occurs without changing the first radio resource.~~

2. (Currently Amended) The communication system of claim 1, wherein each of said plurality of measurement means units is configured to form said measurements of ~~measures~~ said up-link signals from said particular mobile station ~~to form said measurements.~~
- 3-5. (Canceled)
6. (Currently Amended) The communication system of claim 3 ~~1~~, wherein ~~said signal change time is~~ said dynamic switching occurs in less than 1 second.
7. (Canceled)
8. (Currently Amended) The communication system of claim 1, wherein each of said zone manager means is formed of a plurality of zone managers[[,]] is associated with a corresponding one for each of said plurality of transceiver stations.
9. (Currently Amended) The communication system of claim 8, wherein each of said plurality of zone managers are is co-located with its corresponding transceiver station[[s]] at macrodiverse locations.
10. (Canceled).
11. (Currently Amended) The communication system of claim 8, wherein two or more of said plurality of zone managers are co-located at a common location.
12. (Currently Amended) The communication system of claim 11, wherein said ~~common location is~~ two or more of said plurality of zone managers are co-located at a base station controller in a cellular system.
13. (Currently Amended) The communication system of claim 8, wherein said plurality of zone managers includes [[a]] one zone manager designated as a host zone manager for said

particular mobile station and one or more additional ones of the plurality of zone managers designated as assistant zone managers for said particular mobile station, wherein said host zone manager is operative to communicate over said particular broadcast channels with said particular mobile station while said particular dedicated channels for said particular mobile station are dynamically switched among said one or more assistant zone managers and said host zone manager.

14. (Currently Amended) The communication system of claim 13, wherein each of said ~~measurement means includes a~~ plurality of measurement units~~[[,]]~~ is associated with a corresponding one for each of said plurality of zone managers, wherein those ones of the plurality of measurement units that are associated with said host and assistant zone managers is configured to form measurement of said ~~where each measurement unit measures up-link traffic signals from said particular mobile station, wherein said measurements include one or more of the following types of measurements: signal strength measurements, error rate measurements, distance measurements indicating a distance between the particular mobile station and one of the plurality of transceiver stations. to form ones of said measurements as unit measurements.~~

15. (Currently Amended) The communication system of claim ~~13~~ 14, wherein, each of said plurality of transceiver stations include:

one of a plurality of ~~macro-diverse~~ broadcasters ~~distributed at macro-diverse broadcaster locations~~ configured to broadcast said down-link signals~~[[,]]~~; and

one of a plurality of ~~macro-diverse~~ collectors ~~means distributed at macro-diverse collector locations~~ configured to receive said up-link signals~~[[,]]~~;

~~said measurement means includes a plurality of measurement units, one for each of said zone managers, where each measurement unit measure[[s]] up-link signals from said particular mobile station to form unit measurements representing the quality of said received up-link signals at one of said macrodiverse collector locations;~~

wherein said processor ~~means for a~~ of said host zone manager is coupled to receive[[s]] a plurality of said unit measurements from the one of the plurality of measurement units associated with the host zone manager and configured to process[[es]] said

~~unit~~ measurements to determine preferred ones of said plurality of broadcasters and preferred ones of said plurality of collectors for said particular dedicated channels for communications with said particular mobile station[[,]]; and

wherein said control ~~means unit for~~ of said host zone manager is configured to dynamically select[[s]] said particular dedicated channels for said particular mobile station by selecting said preferred ones of said broadcasters to provide particular down-link signals and said preferred ones of said collectors to receive particular up-link signals for said particular mobile station.

16 - 24. (Canceled)

25. (Currently Amended) The communication system of claim 1, wherein each of said ~~zone manager means is formed of a~~ plurality of zone managers[[,]] corresponds to one for each of said plurality of transceiver stations, ~~each particular one of said zone managers having,~~ wherein each of said plurality of zone managers includes:

a resource manager ~~for managing~~ configured to manage available resources in said communication system[[,]]; and

an airlink controller ~~for controlling~~ configured to control ~~the~~ radio channels in said communication system[[,]]. ~~and~~

~~interface means for providing interfaces to said zone managers.~~

26. (Currently Amended) The communication system of claim 25, wherein each of said ~~interface means includes a~~ plurality of zone managers includes a zone manager-to-zone manager interface unit configured to provide an interface to each of one or more other ones of the plurality of ~~for controlling links between said zone managers.~~

27. (Currently Amended) The communication system of claim 25, wherein each of said plurality of zone managers ~~interface means~~ includes a transceiver interface configured to provide an interface for controlling a link between zone manager and to its corresponding transceiver station.

28. (Currently Amended) The communication system of claim 25, wherein said communication

system includes a controller link configured to provide ~~providing~~ an interface between a base station controller and ~~some~~ a subset of said plurality of transceiver stations and said plurality of zone managers.

29. (Canceled)

30. (Currently Amended) The communication system of claim 25, wherein one or more of said plurality of zone managers ~~is~~ are integrated into one or more of said transceiver stations.

31. (Currently Amended) The communication system of claim 1, wherein said control ~~means~~ unit includes is configured to issue:

broadcaster commands for controlling the down-link signals to a first set ~~each of selected ones~~ of said mobile stations, and

collector commands for controlling ~~the~~ a plurality of ~~macro-diverse~~ collectors for changing the up-link signals for each of a second set ~~other selected ones~~ of said mobile stations,

wherein none of said first set of said mobile stations is in said second set of said mobile stations and vice versa.

32. (Currently Amended) The communication system of claim 1, wherein said wireless signals employ multiple access protocols.

33. (Currently Amended) The communication system of claim 32, wherein said multiple access protocols include ~~at least some subset~~ one or more of the following protocols: TDMA, CDMA, SDMA, and FDMA.

34-36. (Canceled)

37. (Currently Amended) The communication system of claim 1, wherein each of said plurality of transceiver stations is configured to communicate over a region containing one or more zones, and wherein said measurements ~~means~~ formed by said plurality of measurement units includes measurements of from wireless signals received by one or more collectors in each of said plurality of transceiver stations.

38. (Currently Amended) The communication system of claim 37, wherein said measurements from said one or more collectors in each of said plurality of transceiver stations include indications of radio link conditions between a mobile station and said one or more collectors.
39. (Currently Amended) The communication system of claim 38, wherein said radio link conditions include ~~at least some subset~~ one or more of the following: path loss, forward error rates, ~~and~~ carrier to interference ratio.
- 40-42. (Canceled)
43. (Currently Amended) The communication system of claim 1, wherein said plurality of zone managers ~~means~~ includes a host zone manager and one or more assistant zone managers and wherein said host zone manager is configured to process[[es]] said measurements from the one or more assistant zone managers ~~means to provide processed measurements to derive processor information for determining said preferred ones of said plurality of transceiver stations.~~
44. (Canceled)
45. (Currently Amended) The communication system of claim 43, wherein said ~~processed measurements~~ processor information includes ~~at least some subset~~ one or more of the following types of information: priority levels for the communication links with mobiles, timing and synchronization information, transmit power level, ~~and~~ locations of mobile stations.
- 46-48. (Canceled)
49. (Currently Amended) The communication system of claim 1, wherein each of said plurality of transceiver stations include broadcaster controllers ~~for controlling~~ configured to control broadcaster transmitters and ~~said broadcaster controller selects~~ and further configured to select one or more broadcaster transmitters for forward communications with mobile stations ~~based on said processor information.~~
50. (Currently Amended) A method, ~~for communicating using wireless signals including down-~~

~~link signals to and up-link signals from mobile stations, the method comprising~~[[,]]:

transmitting, from a plurality of transceiver stations, downlink wireless signals over
broadcast channels and dedicated channels ~~over said wireless signals~~[[,]];

receiving, at said plurality of transceiver stations, uplink wireless signals transmitted from
mobile stations;

forming measurements of said uplink wireless signals ~~with measurement means;~~

~~processing, with processor means,~~ said measurements to determine preferred ones of said
transceiver stations for particular dedicated channels for a particular mobile
station[[,]]; and

~~dynamically switching between, with control means,~~ said preferred ones of said plurality of
transceiver stations during transmitting downlink wireless signals to said particular
mobile station, to provide said particular dedicated channels for said particular
~~mobile station separately from one of said transceiver stations providing particular~~
~~broadcast channels for said particular mobile station, and~~ wherein a radio resource
used for said particular dedicated channels for said particular mobile station
remains unchanged as a result of said dynamically switching ~~between said~~
~~preferred ones of said transceiver stations.~~

51. (Previously Presented) The method of claim 50, further comprising measuring said up-link
signals from said particular mobile station to form said measurements.

52. (Currently Amended) The method of claim 50, ~~further comprising changing said dedicated~~
~~channels as frequently as a signal change time determined by a frequency of said up-link~~
~~signals~~ wherein said dynamically switching occurs in less than one second.

53-56. (Canceled)

57. (Currently Amended) A communication system for providing wireless communications
with mobile devices, the system comprising:

a plurality of transceiver stations configured to communicate with mobile devices,
wherein each of the plurality of transceiver stations is configured to communicate

via broadcast channels and dedicated channels, wherein one of the plurality of transceiver stations ~~having best radio access to a first mobile device will be~~ is designated as a host transceiver station for ~~the~~ a first mobile device, and wherein the host transceiver ~~will~~ is configured to provide the broadcast channels for communication with the first mobile device; and

a plurality of processors each associated with a corresponding one of said plurality of transceiver[[s]] stations, to ~~manage communications~~, wherein one of the plurality of processors associated with the host transceiver station ~~will be~~ is configured to act as a host zone manager for the first mobile device, wherein the ~~host~~ processor associated with the host zone manager is ~~capable of~~ is configured to dynamically ~~selecting~~ switch between selected ones ~~one or more~~ of the plurality of transceiver stations to provide the dedicated channels for communications with the first mobile device ~~based on signal measurements~~, wherein the dynamic switching selection does not affect the host transceiver providing the broadcast channels, and wherein a radio resource used for the dedicated channels for the first mobile device remains unchanged as a result of the dynamic ~~selection~~ switching of the one or more ~~of the plurality of transceiver stations~~.

58. (Canceled)

59. (Currently Amended) The system of claim 57, wherein said ~~host~~ processor associated with the host zone manager is configured to:

receive[[s]] signal measurements from at least ~~some~~ a subset of said plurality of processors, wherein the signal measurements are measurements of up-link signals from the first mobile station;

process[[es]] the received signal measurements ~~received~~ in order to form processed signal measurements; and

dynamically ~~select~~, switch between the selected ones of the plurality of transceiver stations based on the processed signal measurements, ~~the one or more of said plurality of transceivers and the associated processors~~ to provide the dedicated ~~channels~~ channels for the first mobile device.

60 - 62. (Cancelled)

63. (Currently Amended) The system of claim 57, wherein the system is configured such that a first set of the plurality of transceiver[[s]] stations ~~can~~ is configured to provide uplink communications with the first mobile device and a second set of the plurality of transceiver[[s]] stations ~~can~~ is configured to provide downlink communications with the first mobile device.

64. (Currently Amended) The system of claim 57, wherein a first subset of the plurality of transceiver[[s]] stations ~~can~~ is configured to provide traffic signals to the first mobile device and a second subset of the plurality of transceiver[[s]] stations ~~can~~ is configured to provide control signals to the first mobile device.

65-84. (Canceled)

85. (Currently Amended) A method of operating a communication system using wireless down-link signals to and wireless up-link signals from mobile stations, comprising:

dynamically ~~selecting~~ switching between preferred ones of a plurality of transceivers to provide particular dedicated channels for a particular mobile station; and separately providing particular broadcast channels for said particular mobile station from another one of said plurality of transceivers; ~~to provide particular broadcast channels for said particular mobile station, and~~

wherein a radio resource used to provide the particular dedicated channels remains unchanged as a result of the dynamic ~~selection of~~ switching between the preferred one of the plurality of transceivers.

86-94. (Canceled)